

From wang!elf.wang.com!ucsd.edu!info-hams-relay Sat Mar 16 17:40:15 1991 remote
from tosspot
Received: by tosspot (1.63/waf)
via UUCP; Sun, 17 Mar 91 11:37:26 EST
for lee
Received: from somewhere by elf.wang.com
id aa11902; Sat, 16 Mar 91 17:40:14 GMT
Received: from ucsd.edu by news.UU.NET with SMTP
(5.61/UUNET-shadow-mx) id AA27774; Sat, 16 Mar 91 10:34:29 -0500
Received: by ucsd.edu; id AA23033
sendmail 5.64/UCSD-2.1-sun
Sat, 16 Mar 91 04:30:26 -0800 for nixbur!schroeder.pad
Received: by ucsd.edu; id AA23029
sendmail 5.64/UCSD-2.1-sun
Sat, 16 Mar 91 04:30:24 -0800 for /usr/lib/sendmail -oc -odb -oQ/var/spool/
lqueue -oi -finfo-hams-relay info-hams-list
Message-Id: <9103161230.AA23029@ucsd.edu>
Date: Sat, 16 Mar 91 04:30:23 PST
From: Info-Hams Mailing List and Newsgroup <info-hams-relay@ucsd.edu>
Reply-To: Info-Hams@ucsd.edu
Subject: Info-Hams Digest V91 #211
To: Info-Hams@ucsd.edu

Info-Hams Digest Sat, 16 Mar 91 Volume 91 : Issue 211

Today's Topics:

HC910308.ZIP - HamComm: Transmit/receive RTTY with PC/XT/AT
MAJOR SOLAR FLARE ALERT - STORM WARNING UPDATES - 16 MARCH
RE>FWD>Info-Hams Digest V91

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(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Fri, 8 Mar 91 07:23:48 -0500
From: nixbur!schroeder.pad@UUNET.UU.NET
Subject: HC910308.ZIP - HamComm: Transmit/receive RTTY with PC/XT/AT
To: Info-Hams@UCSD.EDU

I have uploaded to SIMTEL20:

pd1:<msdos.hamradio>

HC910308.ZIP HamComm: Transmit/receive RTTY with PC/XT/AT

HamComm is a program for ham radio communications. It supports reception and transmission of amateur radio teletype signals. The interesting thing about it is, that it doesn't require an expensive modem. The audio output of the transceiver is connected to the serial port of any PC/XT/AT compatible computer thru a very simple and low-cost circuit. Only one IC is needed (Op-Amp LM741 or similar) and a few diodes, capacitors and resistors. For transmission the speaker output is connected to the microphone input of the transceiver thru a passive r/c filter. Audio frequency decoding and serial/parallel conversion is all done by the program.

HamComm automatically detects the type of video adapter in use. MDA, CGA, EGA, VGA and Hercules are supported. All graphics routines are written in assembler for speed. No attempt has been made to avoid screen flicker (snow) on cheap CGAs.

HamComm runs on XT machines but the graphics displays of the input signal are more fun to watch on an AT-class machine. Nearly all of the functions can also be controlled by using a mouse. A harddisk is not required. All texts are written in english (sort of :-)) and the online help function includes the schematics for the interface circuit. There are also predefined standard phrases, a QTH distance/direction calculator and a callsign decoder. Currently about 310KB of free RAM is required.

HamComm will probably NOT run under any kind of multitasking software like Desqview or Windows since it needs direct control of the interrupt controller, timer chip and serial I/O hardware.

HamComm 1.3 is FREEWARE. No registration, no fee. Share and enjoy!

Change log from version 1.2 to 1.3:

901212 -TX speaker control changed to smooth out tone.
-Number of stopbits changed from 2 to 1.5.
-QTH calculator: Field QTH2 is now selected on activation.
-The startup value of the audio center frequency can now be set from a configuration file using the command "SET AFCENTER <x>", where <x> is an integer between 500 and 2000.
-The startup value of the audio frequency difference between the mark and space tone can now be set from a configuration file using the command "SET AFSHIFT <x>", where <x> is an integer

between 25 and 1000.

901216 -Idle character transmission can now be controlled using the "Diddle on/off" function on the "Keying" menu.

- The startup state of the "Diddle" flag can be set from a config file using the "SET DIDDLE ON" or "SET DIDDLE OFF" commands.
- Config files can be selected and processed "on the fly" using the "Load .cfg file" item on the "File" menu.
- ALT-X terminates the program.

901222 -Prototype of callsign decoder added. Database needs update. Select item "Callsign" on "QTH" menu to activate function or hit ALT-C (this may change).

- Parser for config files changed. Token "" is now recognized as a NULL token. This is handy for "undefining" text elements from config files.

901228 -Added line to "Scope" function to show current center frequency for precise tuning. Green color on color displays, white on monochrome.

910109 -Added TXDELAY. This is the minimum delay required for the transmitter after activating the ptt line. Can be set from a config file using the "SET TXDELAY <x>" command, where <x> is the number of milliseconds to wait.

- Added TXWAIT. This is an additional delay until the first character is sent, just to give your qso partner a chance for fine tuning to your signal. Can also be set from a config file using the "SET TXWAIT <x>" command, where <x> is the number of milliseconds to wait.

910211 -Added preliminary version of WORD entrymode. Toggled by control-W from the RTTY window.

- Added preliminary version of transmit monitoring. Toggled by control-P from the RTTY window.

910217 -TX monitoring: characters send to the TX buffer are displayed on the line separating the RX window from the TX window. The P option, controlled by control-P, is now enabled on startup.

910308 -Version 1.3 released

73 de Django

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+-----+-----+-----+
| W.F.Schroeder | MS-Dos & OS/2 Systems | Snail: Nixdorf Computer AG |
+-----+-----+-----+ -mail: Dep. WA T271 |
| UUCP: uunet!nixbur!schroeder.pad | Heinz-Nixdorf-Ring |
| Phone: nat-5251-82-3525 | D-4790 Paderborn |
| AMPR: DL5YEC @ DB0BQ 73 es 55 | Fed.Rep. of Germany |
+-----+-----+-----+

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Date: Sat, 16 Mar 1991 02:05:21 -0500
From: oler@HG.ULeTh.CA (CARY OLER)

Subject: MAJOR SOLAR FLARE ALERT - STORM WARNING UPDATES - 16 MARCH
To: info-hams@ucsd.edu

-- MAJOR SOLAR FLARE ALERT --

MARCH 16, 1991

Flare Event Summary
Potential Impact Assessment
Storm Warning Informational Update

MAJOR ENERGETIC EVENT SUMMARY

Another major X-class flare exploded from Region 6545 early this UT day. The event was rated as a major class X1.8/2B Tenflare. The event began at 00:44 UT on 16 March, peaked at 00:52 UT and ended at 01:02 UT on 16 March. This event, like all of the other major events originating from this region, was of short duration. However, it was rich in radio emissions, with significant Type II AND IV bursts. The estimated shock velocity of the Type II is near 1000 km/s. The flare was associated with a 910 s.f.u. Tenflare and an 18,000 s.f.u. burst at 245 MHz. The flare was located at S10E08, easily within range of producing significant terrestrial impacts (however, see the impact assessment below).

POTENTIAL TERRESTRIAL IMPACT FORECAST

There is some uncertainty at the present time with regards to the potential impact this latest flare might have on the earth. The strong Type II and IV sweeps indicate some expulsion of mass was likely. At the present time, we think there is a fairly good chance that an interplanetary shock may be associated with this event. If so, magnetic storming is not out of the question. Any impacts from this flare are likely to be observed late on the 17th or on 18 March. The extent of the potential activity (if it occurs) is still to be determined. An additional update will be posted later on 16 March (with the warning update near 18:00 UT on 16 March).

STORM WARNING INFORMATIONAL UPDATE

A POTENTIAL GEOMAGNETIC STORM WARNING REMAINS IN EFFECT FOR 16 MARCH and may be extended to 17 March if an interplanetary shock arrives within the next 12 to 18 hours. A shock has not yet been observed. It is late

now by almost 12 hours. It is possible this shock could still arrive and produce some respectable storm conditions. However, as time passes by, the potential magnitude of any activity is diminishing. Major geomagnetic storming is still possible. The Pioneer Venus data indicated that some significant activity was out there near the Venusian environment. However, this satellite is a fair distance east of the earth-sun line and would have been more prone to flare-induced activity. There is a possibility the ejected mass will not impinge on the earth. But we believe there is still a fairly high possibility for a shock impact with the earth within the next 12 to 24 hours. Hence, the Potential Major Geomagnetic Storm Warning will be continued for the next 12-24 hours. If nothing materializes by then, it may be cancelled (or updated depending on further analysis of the recent major flare). These shocks have been known to be rather tardy.

Please note that if storming does materialize, auroral activity will not likely become visible until the evening of 16 March (local time) for observers in North America.

Geomagnetic activity has diminished substantially over the past 6 to 9 hours. Very quiet geomagnetic activity has been observed at almost all middle latitude stations as of 06:30 UT on 16 March. This could change abruptly, however, if a shock arrives as expected.

ALL PREVIOUS ALERTS ARE STILL IN EFFECT FOR 16 MARCH. An update will be posted near 18:00 UT on 16 March. Warning cancellations or extensions will be issued then.

Satellite level protons are still very near event thresholds. They are hovering between the 5 and 9 p.f.u. level (10 is the event threshold). If an interplanetary shock arrives, protons could easily surpass the event threshold briefly. A polar cap disturbance is currently in progress. The cause is the elevated proton fluence levels in progress.

If a shock arrives, a bulletin will be posted immediately (provided the shock arrives during manned hours). If the shock arrives during unmanned hours, a bulletin will be posted immediately thereafter.

** End of Alert **

Date: 15 Mar 91 19:58:23
From: Chuck Beck <Chuck_Beck@mctgate.mct.anl.gov>
Subject: RE>FWD>Info-Hams Digest V91
To: Info-Hams@UCSD.Edu

Reply to: RE>FWD>Info-Hams Digest V91 #208

Shame that you cannot post this stuff to our packet node! (wonder if anyone would read it)

Date: 3/15/91
To: Chuck Beck
From: Loren Thompson
Info-Hams Digest Thu, 14 Mar 91 Volume 91 : Issue 208

Today's Topics:
 MAJOR SOLAR FLARE ALERT - HIGH IMPACT EXPECTED FOR 16 MARCH

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policies or positions of any party. Your mileage may vary. So there.

Date: Wed, 13 Mar 1991 16:18:32 -0500
From: oler@HG.Uleth.CA (CARY OLER)
Subject: MAJOR SOLAR FLARE ALERT - HIGH IMPACT EXPECTED FOR 16 MARCH
To: info-hams@ucsd.edu

-- MAJOR SOLAR FLARE ALERT --

MARCH 13, 1991
Alert #2

Flare Event Summary
** POTENTIALLY HIGH TERRESTRIAL IMPACTS EXPECTED **

MAJOR ENERGETIC EVENT SUMMARY

Two additional major solar flares have occurred over the past 24 hours.
The first major event was rated a class X1.3/2B and seems to have been
associated with a Type IV sweep. Several Type IV sweeps have been observed
recently. The event began at 08:00 UT, peaked at 08:08 UT and ended at 08:13

UT. The flare was located within Region 6545 near S10E45 (unofficial). The flare was associated with a strong 1300 s.f.u. Tenflare at 08:02 UT.

The second major flare erupted at 15:42 UT, peaked at 15:48 UT and ended at 16:02 UT. This event was rated a class X3.9/1N. A strong Tenflare of 3600 s.f.u. was also observed with this flare.

Satellite protons increased to near event thresholds recently. The peak proton count reached 9 p.f.u. (10 is the event level). It has since declined and is presently holding at near 4 p.f.u..

Region 6545 is a potent region containing large sunspots in close proximity to one another. Magnetic fields are high and gradients are strong. This region will continue to produce major solar flares of class X or M intensities. Protons could easily surpass event thresholds if flaring continues.

Region 6538 continues to remain fairly dormant in flare output, but contains all of the ingredients necessary to begin major flaring again. It is expected to begin to produce at least M-class flares anytime now.

POTENTIAL TERRESTRIAL IMPACT FORECAST

A POTENTIALLY HIGH TERRESTRIAL IMPACT IS BEING FORECASTED FOR 15, 16 AND POSSIBLY 17 MARCH!

A MAJOR GEOMAGNETIC AND AURORAL STORM is possible on 15 and/or 16 March. Data obtained from Pioneer Venus show that the solar wind velocity has increased dramatically to values near 970 km/s with a strongly directed southward magnetic component. It is possible that the earth could be hit with some of the material streaming by this satellite. Current predictions estimate that the geomagnetic storming could push the A-index to levels near 50 on 16 March. Middle latitude magnetic K-indices are expected to be sustained near 5 and 6 with possible brief periods near 7 (if activity is more intense than expected). High latitude magnetic activity could surpass A-indices of 100 with associated K-index values between 7 and 9 (it should be noted that a K-index of 9 is the top of the scale). Magnetic perturbations over high latitudes could approach 1,500 to 2,000 gammas. Middle latitudes could see fluctuations between 100 and 250 gammas (for mid to southerly middle latitudes). Northerly middle latitudes could see fluctuations ranging from 200 to 1000 gammas.

A MAJOR geomagnetic storm is possible. Storming is expected to peak on 16 March. A sudden storm commencement associated with the arrival of the interplanetary shockwave is expected sometime on 15 March. It is difficult to determine when this shock might hit, but preliminary estimates suggest that the shock could arrive near 12:00 UT on 15 March. Minor to major

geomagnetic storming could follow shortly thereafter.

A POTENTIAL LOW LATITUDE AURORAL ACTIVITY WARNING is being issued for 16 March. Auroral activity could become visible at southerly middle and some low latitude regions if storming reaches or exceeds predicted levels. High latitude and northerly middle latitudes could experience auroral storming with possible high auroral activity.

Significant VHF auroral backscatter will be possible late on 15 and on 16 March. HF conditions are expected to be quite disturbed on 16 March. Significant fading, flutter, noise and absorption are possible. If storming occurs, MUF's will decrease and LUF's will increase notably. Updates and/or modifications to this forecast will be posted when available.

Major flaring is expected to continue. Proton and/or PCA activity could occur anytime. Watch for possible future warnings and/or alerts.

** End of Alert **

End of Info-Hams Digest

----- RFC822 Header Follows -----

Received: by mctgate.mct.anl.gov; 14 Mar 91 23:05:11
Received: from ANLVM by ANLVM.CTD.ANL.GOV (IBM VM SMTP R1.2.2ANL-MX) with BSMT
id 4376; Thu, 14 Mar 91 22:58:24 CST
Received: from YaleVM.YCC.Yale.Edu by ANLVM (Mailer R2.07B) with BSMT id 4375;
Thu, 14 Mar 91 22:58:23 CST
Received: from YALEVM.BITNET by YaleVM.YCC.Yale.Edu (Mailer R2.03B) with BSMT
id 1813; Thu, 14 Mar 91 23:53:15 EST
Date: Thu, 14 Mar 91 04:30:26 PST
Reply-To: Info-Hams@UCSD.Edu
Sender: Info-Hams redistribution <DIST-HAM@RPIECS.BITNET>
From: Info-Hams Mailing List and Newsgroup <info-hams-relay@UCSD.EDU>
Subject: Info-Hams Digest V91 #208
X-To: Info-Hams@UCSD.EDU
To: Multiple recipients of list DIST-HAM <DIST-HAM@RPIECS>

End of Info-Hams Digest
